

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number
WO 03/082093 A3

(51) International Patent Classification⁷: **A61B 5/00**,
G06F 19/00

(21) International Application Number: PCT/IB03/00842

(22) International Filing Date: 6 March 2003 (06.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02076227.4 29 March 2002 (29.03.2002) EP

(71) Applicant (for all designated States except DE, US):
KONINKLIJKE PHILIPS ELECTRONICS N.V.
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven
(NL).

(71) Applicant (for DE only): **PHILIPS INTELLECTUAL
PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-
damm 94, 20099 Hamburg (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **REITER, Harald**

[DE/DE]; c/o Prof. Holstlaan 6, NL-5656 AA Eind-
hoven (NL). **VOGTMEIER, Gereon** [DE/DE]; c/o Prof.
Holstlaan 6, NL-5656 AA Eindhoven (NL). **LAUTER,**
Josef [DE/DE]; c/o Prof. Holstlaan 6, NL-5656 AA
Eindhoven (NL). **SUCH, Olaf** [DE/DE]; c/o Prof. Holst-
laan 6, NL-5656 AA Eindhoven (NL). **REICHINGER,**
Christian [DE/DE]; c/o Prof. Holstlaan 6, NL-5656 AA
Eindhoven (NL). **SCHMIDT, Ralf** [DE/DE]; c/o Prof.
Holstlaan 6, NL-5656 AA Eindhoven (NL).

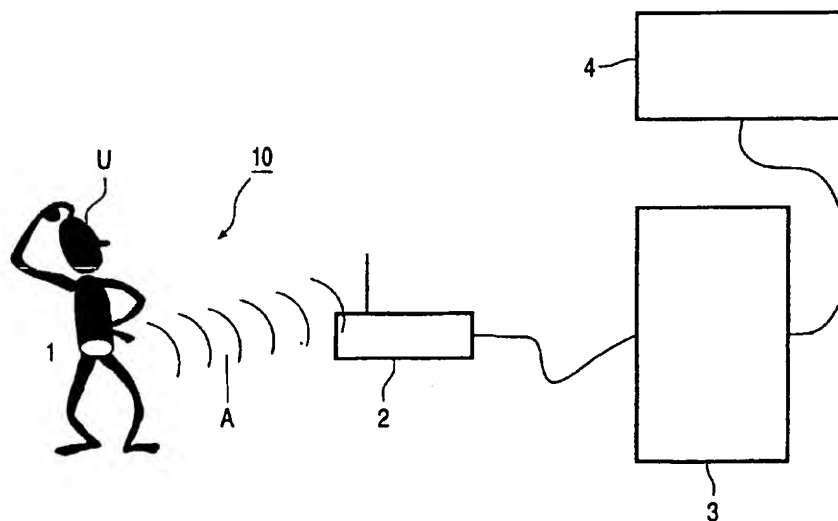
(74) Agent: **SCHOUTEN, Marcus, M.**; Internationaal Oc-
trooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eind-
hoven (NL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A DETECTION AND ALARM SYSTEM



(57) Abstract: A system for continuous monitoring of a physiological condition of a recipient arranged to alarm the recipient and a remote service center in case an abnormality in the physiological condition occurs. For that purpose the system comprises monitoring means provided with a set of electrodes to be arranged on the body of the recipient and to derive a signal related to said condition, detection means actuated by said electrodes and arranged to process said signal in order to derive a feature in the signal characteristic to said abnormality; alarm means arranged to trigger an alarm signal upon a detection of said feature by the detection means; transmission means arranged to transmit the alarm signal to a station responsive to said alarm signal. The system architecture is arranged in such a way that only the alarm signal is transferred to the station thus allowing the monitoring in a continuous way.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*

(88) Date of publication of the international search report:

18 December 2003